

AMENDMENTS TO THE CLAIMS

1-2 (Canceled)

3. (Currently amended) An electrode in accordance with claim [[1]] 2, the electrode comprising a transition metal ~~chosen~~ selected from the group ~~comprising~~ consisting of: Ti, V, Cr, Ni, Mn, Fe, Co, and Cu.

4. (Canceled)

5. (Original) An electrode for a Li-based electrochemical energy storage device, the electrode comprising an LiX-M amorphous composite or nano-composite where:

Li is lithium,

X is fluorine and

M is any transition metal in initially metallic form, the transition metal being in the form of metal clusters and the metal clusters and the LiX being dispersed at an atomic scale or at a nanometer scale to provide a highly reversible lithium storage behaviour.

6. (Currently amended) An electrode for a Li-based electrochemical energy storage device, the electrode comprising an ~~LiX-M~~ Li₂O amorphous composite or nano-composite where:

~~Li is lithium,~~

~~X is oxygen and~~

M is at least one of ruthenium and molybdenum in initially metallic form, in the form of metal clusters and the metal clusters and the ~~LiX~~ Li₂O being dispersed ~~at an atomic scale or~~ at a nanometer scale to provide a highly reversible lithium storage behaviour.

7. (Currently amended) A Li-based electrochemical storage device comprising positive and negative electrodes and an electrolyte disposed between them, the electrolyte including a lithium salt, an organic, non-aqueous, anhydrous solvent or a polymer and one of the positive and negative electrodes comprising an LiX-M amorphous composite or nano-composite where:

Li is lithium,

X is fluorine and

M is any transition metal in initially metallic form, in the form of metal clusters and the metal clusters and the LiX being dispersed at an atomic scale or at a nanometer scale to provide a highly reversible lithium storage behaviour.

8. (Currently amended) A Li-based electrochemical storage device comprising positive and negative electrodes and an electrolyte disposed between them, the electrolyte including a lithium salt, an organic, non-aqueous, anhydrous solvent or a polymer and one of the positive and negative electrodes being the electrode of claim 6 comprising an LiX-M amorphous composite or nano-composite where:

~~Li is lithium,~~

~~X is oxygen and~~

~~M is ruthenium or molybdenum in initially metallic form.~~

9. (Currently amended) A Li-based electrochemical storage device in accordance with claim [[1]] ~~7~~ wherein it is ~~realised~~ realized as a rechargeable battery.

10. (Currently amended) A Li-based electrochemical storage device in accordance with claim [[1]] ~~7~~ wherein it is ~~realised~~ realized as a supercapacitor.

11. (Canceled)

12. (New) An electrode in accordance with claim 6 wherein both the Li_2O and the metal clusters have average particle sizes of 1-10 nanometers.

13. (New) A Li-based electrochemical storage device in accordance with claim 6 wherein it is realized as a rechargeable battery.

14. (New) A Li-based electrochemical storage device in accordance with claim 6 wherein it is realized as a supercapacitor.